UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

MARILYN F. QUIRIN, Special)	
Representative of the Estate of)	
RONALD J. QUIRIN, Deceased,)	
)	Judge Joan B. Gottschall
Plaintiff,)	
)	Case No. 13 C 2633
v.)	
)	
LORILLARD TOBACCO COMPANY,)	
et al.,)	
)	
Defendants.)	

MEMORANDUM OPINION & ORDER

Plaintiff Marilyn F. Quirin, special representative of the estate of Ronald J. Quirin ("Quirin"), has sued defendants Lorillard Tobacco Company ("Lorillard") and Hollingsworth & Vose Company ("H&V") on a negligence theory, alleging that Mr. Quirin's mesothelioma was caused by his exposure to asbestos while smoking Kent cigarettes, which, during the 1950s, were manufactured with a "Micronite" filter that contained asbestos (hereinafter "original Kents"). Now before the court are two motions brought pursuant to Federal Rule of Evidence 702 and Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993): (1) Quirin's "Motion to Preclude Reliance by Defendants' Expert Witnesses on Scientifically Unreliable Testing Performed by Lorillard in the 1950s" and (2) Lorillard and H&V's "Motion to Exclude the Expert Testimony of John Pauly, Ph.D." The motions are granted in part and denied in part.

I. LEGAL STANDARD

Under Rule 702, an expert witness, "qualified . . . by knowledge, skill, experience, training, or education," may testify if: "(a) the expert's scientific, technical, or other specialized

knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702.

A trial judge must ensure "that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert*, 509 U.S. at 597. "To do so, the district court must ascertain whether the expert is qualified, whether his or her methodology is scientifically reliable, and whether the testimony will 'assist the trier of fact to understand the evidence or to determine a fact in issue." *Bielskis v. Louisville Ladder, Inc.*, 663 F.3d 887, 893 (7th Cir. 2011) (quoting Fed. R. Evid. 702). The court must prevent an expert from offering legal conclusions, as "experts cannot make those." *See United States v. Diekhoff*, 535 F.3d 611, 619 (7th Cir. 2008).

"The reliability of the expert's principles and methods can be examined by looking at factors such as (1) whether the scientific theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether a particular technique has a known potential rate of error; and (4) whether the theory or technique is generally accepted in the relevant scientific community." *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013) (citing *Daubert*, 509 U.S. at 593-94). The Seventh Circuit has explained that the judge's concern "is not the ultimate correctness of the expert's conclusions. Instead, it is the soundness and care with which the expert arrived at her opinion: the inquiry must 'focus . . . solely on principles and methodology, not on the conclusions they generate." *Id.* (quoting *Daubert*, 509 U.S. at 595). If the expert's principles and methodology reflect reliable scientific practice, "[v]igorous cross-examination, presentation of contrary evidence, and

careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596.

II. ANALYSIS

A. Opinions Based on Testing of Original Kent Cigarettes in the 1950s

Quirin seeks to preclude Lorillard and H&V's expert witnesses (Dr. Allen Gibbs, Dr. Williams Hinds, and Dr. Kevin Reinert) from relying on testing performed by Lorillard and several contractors in the 1950s in drawing conclusions regarding the release of asbestos fibers from original Kent cigarettes. Quirin does not challenge the three experts' qualifications or their testimony in its entirety, only the conclusions that are based on Lorillard's testing. The testing in question was performed by (1) Dr. John Killian, (2) Dr. David Kendall, (3) the Laboratory of Industrial Hygiene, (4) Dr. Ernest Fullam, and (5) the Armour Research Foundation.

Lorillard and H&V first respond generally by arguing that documents describing the testing are admissible as business records and may be otherwise relevant to the case. Although the court acknowledges that possibility, it has nothing to do with the permissible scope of *expert* testimony or whether the conclusions the defendants' experts drew from the documents are sound.

Lorillard and H&V further argue that testimony based on the studies should be admitted because the people who conducted the testing are now unavailable to testify, no freshly-manufactured or properly preserved original Kents are available to test today, no additional documents exist from the studies other than those available to the experts, and the studies are part of the record that an expert would be expected to review. Again, none of these arguments go to the scientific validity of the tests themselves. Nor are they relevant to whether the conclusions the experts drew from the studies are reliable.

The court reviews, in turn, each set of tests and the expert reports discussing the testing.

1. Killian

Two of Lorillard and H&V's experts, Dr. Hinds and Dr. Reinert, summarize in their expert reports testing performed for Lorillard by Dr. John Killian. Dr. Hinds states in his report:

During the period 1951 to 1955 Killian Research Laboratories, Inc., under contract to P. Lorillard Co., tested Kent filter cigarettes, primarily for filter efficiency. In November 1951 they measured fiber release into the tar from 200 regular and 200 filtered Kents. They ashed the tar and analyzed the residue for silica and found no difference between the filtered and non-filtered cigarettes and no measureable quantity of asbestos, a silicate, in either. Lorillard repeated this experiment in its laboratories by testing 100 Kent cigarettes and found no evidence of fiber release. To be sure, Killian repeated the experiments with 1000 of each type of cigarette and found 75 ug of silicate in the tar from regular cigarettes and no silicate in the tar from Kent filter cigarettes.

(Defs.' Expert Reports Ex. 3 (Hinds Report) 3, ECF No. 84-3.) Dr. Reinert states in his report:

In November 1951, P. Lorillard used standard mechanical smoking equipment to test a sample size of 100 Kent cigarettes and observed no measurable quantity of asbestos in the smoke. In addition, using a gravimetric method, Dr. Killian in November 1951 found no evidence that asbestos was released in the smoke from two tests performed first on 200 Kent cigarettes and later on 1000 Kent cigarettes, for a total of 1,200 Kent cigarettes.

(Def. Lorillard's Expert Report Ex. 5 (Reinert Report) 3, ECF No. 84-5.)

The existing records of the testing performed by Dr. Killian in 1951 consist of two handwritten notes from November 1951 written by Lorillard executive Dr. H. B. Parmele, memorializing phone conversations with Dr. Killian. The notes are similar in content to the experts' statements above. They mention "silica," not asbestos. (Pl.'s Mot. to Exclude Ex. O (Nov. 9, 1951 Notes), ECF No. 129-16.) Dr. Reinert saw no reports or notes authored by Dr. Killian himself, only the phone messages. (Pl.'s Mot. to Exclude Ex. L (Reinert Dep.) 14:1-19:25, ECF No. 129-13.)

The court cannot determine from Dr. Parmele's notes how the cigarettes tested by Dr. Killian were smoked or how the presence or absence of silica was measured by Dr. Killian. Given that Dr. Killian's data and reports are unavailable, it was impossible for Dr. Hinds and Dr. Reinert to verify the reliability of his research or determine whether he used accepted or replicable techniques. Yet, in summarizing Dr. Killian's results, the expert reports do not mention the fact that Dr. Killian's actual test results are unavailable, nor do they indicate that this absence of information makes evaluating Dr. Killian's tests in any way problematic. The reports simply repeat the content of Dr. Parmele's notes. The experts' basis for accepting Dr. Parmele's notes as valid and reliable is unclear. Furthermore, in Lorillard and H&V's response to the motion to exclude this evidence, the only argument raised in support of the reliability of Dr. Killian's research is that he "tested 1000 cigarettes." (Defs.' Resp. to Mot. to Exclude 9, ECF No. 164.)

"The goal of Daubert is to assure that experts employ the same 'intellectual rigor' in their courtroom testimony as would be employed by an expert in the relevant field." *Jenkins v. Bartlett*, 487 F.3d 482, 489 (7th Cir. 2007) (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)). As the Third Circuit has stated, where "the data underlying the expert's opinion are so unreliable that no reasonable expert could base an opinion on them, the opinion resting on that data must be excluded." *In re TMI Litig.*, 193 F.3d 613, 697 (3d Cir. 1999). The burden of showing that an expert's testimony is reliable lies with Lorillard and H&V, as the proponents of the evidence. Insofar as Lorillard and H&V's experts' opinions are based on Dr. Killian's tests, it is impossible to evaluate whether the methodology Dr. Killian used was reliable in the absence of any information about how the testing was actually conducted. The opinions

that merely recite Dr. Killian's conclusions as recorded by Dr. Parmele therefore do not meet the threshold of admissibility for expert testimony required by the Federal Rules and *Daubert*.

2. Kendall

Dr. Hinds and Dr. Reinert also rely in their expert reports on testing performed by Dr. Kendall in 1954. Dr. Hinds states in his expert report:

In 1954 David N. Kendall, PhD, a consulting chemist, tested the smoke from Kent filter cigarettes and found no evidence of silica or silicates. His infrared absorption method had a sensitivity of 0.1% by weight.

(Hinds Report 3.) Dr. Reinert states:

During February 1954, Dr. Kendall, using infrared spectroscopy quantified with specific standards, also demonstrated that no asbestos was released into smoke from Kent filters after smoking hundreds of cigarettes.

(Reinert Report 3.) Although Dr. Kendall apparently produced several reports to Lorillard regarding his research analyzing the components of cigarette smoke, nothing in the record presented to the court indicates how Dr. Kendall's testing was performed. In their response to the motion to exclude references to Dr. Kendall's testing, Lorillard and H&V cite only to Dr. Reinert's deposition, in which he states that Dr. Kendall "was looking for the presence or absence of silica in both the Old Gold and Kent smoke" and that "typically you're going to be running standards . . . to calibrate and assess the samples," although he acknowledges that Dr. Kendall's reports did not state how the machine was calibrated. (Defs.' Resp. to Mot. to Exclude Ex. D (Reinert Dep.) 59:20-22, ECF No. 163-4.) This testimony does not help the court to understand how Dr. Kendall's study was designed, the extent to which asbestos fibers could have been measured using Dr. Kendall's techniques, the basis for the conclusion that no asbestos was observed in the smoke, or whether the techniques employed by Dr. Kendall were reliable, so that it may address whether the experts' summaries of Dr. Kendall's work satisfy *Daubert*. Lorillard

and H&V, as the proponent of this evidence, have therefore not met their burden to demonstrate by a preponderance of the evidence that expert testimony based on Dr. Kendall's work satisfies the *Daubert* standard. If Lorillard and H&V believe they can present evidence sufficient to make this showing, they may move the court for a *Daubert* hearing on the admissibility of expert testimony based on Dr. Kendall's reports.

3. The Laboratory of Industrial Hygiene

Dr. Reinert states in his expert report:

P. Lorillard asked the Laboratory of Industrial Hygiene in 1953 to compare smoke passed through a Kent filter to New York City air. This laboratory demonstrated that the Kent cigarette did not release asbestos in any amount greater and probably less than the amount of asbestos typically found in New York City air (background).

(Reinert Report 3.) During his deposition, Dr. Reinert explained that he did not see the actual study produced by the Laboratory of Industrial Hygiene, only "a letter from Parmele to someone else at a higher level within Lorillard." (Reinert Dep. 2476:26-27.) The June 15, 1953, letter from Dr. Parmele to Lorillard President W.J. Halley states,

[W]e have had the Laboratory of Industrial Hygiene conduct thorough tests to prove the absence of silica in the smoke from Kent Cigarettes. . . . We wish to call to your attention the air blank results which indicate the normal amount of silica in New York City air. Values of 0.1 to 0.2 milligrams are shown. It is gratifying to note that the amount of silica in the smoke from Kent Cigarettes is no greater, in fact, probably a little less than the amount of silica in the air which we normally breathe. The above is the information which we wanted.

(Pl.'s Mot. to Exclude Ex. Q (June 15, 1953 Letter), ECF No. 129-18.)

The letter includes no information about the research methods used or how the silica in the cigarette smoke was measured. Thus, as was the case with Dr. Killian's tests, it would have been impossible for Dr. Reinert to have verified the reliability of the research in question. His

conclusion as to what the "laboratory demonstrated" therefore does not meet the *Daubert* standard for expert testimony and is inadmissible.

4. Fullam

Dr. Fullam was engaged to conduct two rounds of testing for Lorillard using electron microscopy. The first tests were performed on "smoke solutions" sent to him by Lorillard, and the second round of tests were performed on "experimental" Kent cigarettes furnished by Lorillard and smoked using a homemade smoking apparatus. Dr. Hinds states in his report:

The Ernest F. Fullam, Inc. laboratory conducted some tests on asbestos fiber release from experimental cigarettes and Kent filter cigarettes in 1954. Their initial tests were performed on samples of Kent cigarette smoke collected by Lorillard using a smoking machine. They examined the samples in an electron microscope at 15,000X magnification, but found no asbestos fibers. Next they repeated the tests, but with the smoke samples taken in his basement laboratory using a manually operated smoking device. It was necessary to manipulate the cigarettes in order to attach them to the smoking device. The smoke particulate was collected by bubbling the smoke stream through acetone. The collected material was concentrated and a drop put on an electron microscope grid and allowed to evaporate so that the residue could by examined by electron microscopy. With this procedure they found a few fibers. A comparison of Fullam's with guidelines results **EPA** (Fed. Reg., contamination/background levels suggests the number of fibers measured by Fullam most likely were the result of filter contamination/background levels. Fullam found one asbestos fiber for approximately every 20 electron microscope grid openings examined, whereas EPA considers one asbestos structure for every 10 grid openings to be comparable to contamination/background levels. Fullam's results are below filter contamination/background levels, which imply that we cannot say the number of fiber[s] released is different from zero. Rough calculations using these results suggest that smoking one pack/day of Kent filter cigarettes would result in far fewer fibers, less than 1/800, being inhaled than permitted by current OSHA standards.

(Hinds Report 4.) Dr. Reinert similarly states:

In early 1954, Mr. Fullam initially did not find asbestos in Kent cigarette smoke samples he analyzed using an electron microscope. Subsequently, Mr. Fullam smoked experimental cigarettes received from P. Lorillard, using a non-standard smoking apparatus in his basement home laboratory. Based on those experimental samples, he reported finding traces of fibers, which he did not definitively identify.

. . .

It is my opinion that Mr. Fullam's test results on experimental cigarettes smoked using his non-standard smoking apparatus are questionable as he did not use a mechanical or automated smoking machine, he did not run method or laboratory blanks and he did not confirm the identification of the fibers he observed, as requested by P. Lorillard. In addition, his results are inconsistent with the treatments used on some experimental cigarette filters provided by P. Lorillard. Consequently, some of Mr. Fullam's findings on the experimental cigarette filters are contrary to the expected results. Nevertheless, taken in total, Mr. Fullam's results on these experimental cigarettes are considered at or below background.

(Reinert Report 3-4.)

No reports are available detailing Dr. Fullam's studies. The method of generating the smoke samples is not documented. Dr. Reinert testified at deposition that he assumed that the smoke samples provided to Dr. Fullam by Lorillard were produced with a standard smoking machine. (Reinert Dep. 83:22-84:9.) The only evidence presented to the court regarding Dr. Fullam's work consists of two letters written by Dr. Parmele. The first is a February 12, 1954, letter from Dr. Parmele authorizing Dr. Fullam to "undertake the project" and agreeing to supply Dr. Fullam with smoke samples suspended in acetone. (Pl.'s Mot. to Exclude Ex. R (Feb. 12, 1954 Letter), ECF No. 129-19.) The second, a December 1, 1954, letter from Dr. Parmele to Dr. Harold Knudson, states that Dr. Fullam "smoke[d] several cigarettes . . . and passe[d] the smoke into a small acetone trap. He then centrifuge[d] this acetone in such a manner as to throw out and separate any suspended solid particles." (Mot. to Exclude Ex. S (Dec. 1, 1954 Letter).) Dr. Fullam then prepared specimen screens which he scanned with the electron microscope, "counting the number of meshes in his screening that he ha[d] to look at before finding a single particle of asbestos." (Id.) The letter included a table of the samples covered in Fullam's report and noted that the data "makes very little sense." (*Id.*)

The other documents apparently in existence relating to Dr. Fullam's work were provided to the parties' experts, but they were not provided to the court. Furthermore, Lorillard and

H&V's response to the motion to exclude contains no explanation as to how Dr. Fullam's work reliably supports Dr. Hinds and Dr. Reinert's conclusions that the tests showed the presence of asbestos fibers in the smoke at or below background levels. Lorillard and H&V, as the proponent of this evidence, have not met their burden to demonstrate by a preponderance of the evidence that expert testimony based on Dr. Fullam's work satisfies the *Daubert* standard. If Lorillard and H&V believe they can present evidence sufficient to make this showing, they may move the court for a *Daubert* hearing on the admissibility of expert testimony based on the testing performed by Dr. Fullam.

5. Armour Research Foundation

Dr. Gibbs states in his report:

I have reviewed the 1950s Armour Research Foundation reports #11, #12 and the 1954 summary report on fibre release from Kent cigarettes. These tests indicate a minimal release of fibers from the filter when smoked, which was quantified as 3 fibers per cigarette.

(Defs.' Expert Reports Ex. 1 (Gibbs Report) 3, ECF No. 93-1.) Dr. Hinds states:

In 1954 Armour Research Foundation (ARF) tested the Kent filter and found three fibers were released from one cigarette during the lighting puff. In a separate test when 1 cm of the cigarette was consumed no fibers were released. The results of the first test correspond to 60 fibers being released by smoking one pack of Kent cigarettes. This is far below the daily asbestos exposure one could receive based on current OSHA standards and well below the exposure one gets by just breathing urban air, where an asbestos fiber concentration for outdoor air of 0.0004 fibers/mL (>5um in length) (Mossman at al., 1990) is assumed. ARF also noted that some of the supporting (cellulose) fibers were released by manipulation.

(Hinds Report 4.) Dr. Reinert states in his report:

[I]n 1954, the Armour Research Foundation smoked fresh Kent cigarettes using an automated smoking machine. When a cigarette was smoked enough to light it, three fibers were released; however, in another experiment, no fibers were collected when a cigarette was smoked one centimeter. Consistent with the scientific principles at work in the filter during smoking, the Armour Research Foundation also reported and documented with photographs that the moisture and

other constituents in tobacco smoke caused the fibers to bind more firmly together, thereby minimizing and even preventing release. As noted above, these results were obtained using an automated smoking machine. Armour also investigated the number of particles produced during smoking and completed many other particulate-based projects (including number, shape, size, and distribution of particulates) using Kent and other cigarettes.

(Reinert Report 3.)

In contrast to much of the other testing discussed above, reports exist and are in evidence detailing the testing conducted by the Armour Research Foundation. Thus, the methods employed, the results obtained, and the potential limitations of the testing are sufficiently clear that they can be evaluated by the parties' experts. Given the absence of more reliable testing on which the experts could have relied, the court concludes that it was appropriate for Lorillard and H&V's experts to discuss the testing performed by the Armour Research Foundation in their expert reports. Moreover, the testing results are accurately described in the reports.

Quirin's objection to the testing of the Armour Research Foundation is that "the sum total of the ARF testing relied upon by all of Lorillard's experts consists of essentially two puffs from one cigarette." (Mot. to Exclude 14.) This is a challenge to the weight of the evidence and to the experts' conclusions that may be raised during cross-examination and by Quirin's own expert. See Manpower, Inc. v. Ins. Co. of Penn., 732 F.3d 796, 810 (7th Cir. 2013) ("Assuming a rational connection between the data and the opinion—as there was here—an expert's reliance on faulty information is a matter to be explored on cross-examination; it does not go to admissibility."). Quirin's motion is therefore denied as to expert testimony based upon the testing of the Armour Research Foundation.

B. Dr. Pauly's Testimony

Lorillard and H&V move to exclude the testimony of Quirin's expert, Dr. Pauly. Dr. Pauly was retained to evaluate various tests performed on original Kent cigarettes, designed to

determine whether the cigarettes released asbestos fibers when smoked. Dr. Pauly is a professor of immunology and a cancer research scientist. He has been involved with laboratory experimentation on cigarette filters since the early 1990s. Dr. Pauly has published papers on cigarette filter design and on the release of (non-asbestos) fibers from cigarette filters. Dr. Pauly was asked by Quirin's attorneys to evaluate testing conducted by Lorillard and various contractors in the 1950s. He offered an opinion as to whether the testing "adhered to basic principles of the scientific method." (Pl.'s Expert Reports Ex. 2 (Pauly Report) 2, ECF No. 82-2.) Dr. Pauly also offered opinions on more recent testing of original Kents by Dr. William Longo and Dr. James Millette.

1. Opinions on Testing of Original Kent Cigarettes Conducted in the 1950s

In his expert report, Dr. Pauly addresses the five sets of tests discussed above that were conducted by Lorillard and its contractors.¹ With respect to each, he describes the existing documents detailing the testing and offers his opinion as to the importance of missing information on how the testing was conducted and analytical flaws in the study designs. He concludes with respect to several of the studies that insufficient information exists to support their scientific validity. He also finds significant flaws in the design of the studies.

Lorillard and H&V first argue that Dr. Pauly is unqualified to offer opinions regarding testing performed on original Kent cigarettes at the time of their manufacture in the 1950s. They

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In addition to challenging Dr. Pauly's evaluation of the five sets of tests previously discussed, Lorillard and H&V argue that Dr. Pauly may not rely on research on original Kents conducted by Althea Revere and Wanda Farr, because the evidence of their research results is unreliable and is inadmissible hearsay. Dr. Pauly's expert report does not discuss Revere and Farr's findings or include opinions based on their work. There is, however, some indication in his deposition testimony that he might refer to their work at trial. There is apparently no documentary record of the results of this research. Even so, the record presented to the court does not permit a ruling at this time on whether this evidence must be excluded under *Daubert*. Lorillard and H&V may raise objections to the evidence at trial or through a motion *in limine*.

contend that Dr. Pauly has no specialized knowledge about testing asbestos products for fiber release or the design and testing of original Kent cigarettes. Although he has tested other brands of cigarettes for the release of non-asbestos fibers, he has never tested original Kents, the only cigarettes made with an asbestos filter.

The court disagrees with Lorillard and H&V's assessment of Dr. Pauly's qualifications. Dr. Pauly's expertise in testing cigarette filters for fiber release is closely related to the subject matter at issue here and renders him qualified to offer opinions on the design of studies that test for fiber release from cigarette filters. Although Dr. Pauly's own research concerns fibers other than asbestos that may be released from cigarette filters, this does not make his knowledge irrelevant. He is capable of evaluating the methods employed and the data reported in the studies he was asked to review. *See Doe v. Cutter Biological, Inc.*, 971 F.2d 375, 385 (9th Cir. 1992) ("Ordinarily, courts impose no requirement that an expert be a specialist in a given field, although there may be a requirement that he or she be of a certain profession").

Lorillard and H&V further argue that Dr. Pauly's opinions about Lorillard's testing lack a proper foundation because he "did not participate in any of this testing, and he did not perform his own independent investigation or analysis." (Defs.' Mot. to Exclude 9, ECF No. 126.) But expert testimony need not be based on first-hand knowledge or research actually conducted by the expert himself. *See Daubert*, 509 U.S. at 592; *Mihailovich v. Laatsch*, 359 F.3d 892, 919 (7th Cir. 2004) ("[T]he *Daubert* framework is a flexible one that must be adapted to the . . . type of testimony being proffered."); *Walker v. Soo Line R.R.*, 208 F.3d 581, 588 (7th Cir. 2000) ("[C]ourts frequently have pointed to an expert's reliance on the reports of others as an indication that their testimony is reliable."). Indeed, were an expert required to directly participate in testing in order to offer an opinion about the testing's merits, much of the

testimony of Lorillard and H&V's experts would also be barred, as they, like Dr. Pauly, have "no knowledge about [the scientists'] work other than what is contained in the documents [they] reviewed." (Defs.' Mot. to Exclude 9.) Furthermore, insofar as Lorillard and H&V argue that Dr. Pauly lacks a foundation for testimony regarding the studies conducted in the 1950s because "he lacks the information necessary to pass scientific judgment" on the testing, that his precisely the point of his testimony—that insufficient documentation exists to demonstrate the scientific validity of the testing. The court concludes that Dr. Pauly's opinions concerning testing performed on original Kents in the 1950s are based on an adequate foundation and are relevant to the issues in the case, and that they will be helpful to the jury in evaluating the evidence.

Lorillard and H&V further argue that Dr. Pauly should not be allowed to offer opinions regarding the contents of corporate documents, particularly those authored by Dr. Parmele, or regarding the perceived motives or biases of Dr. Parmele or Lorillard. The court finds no such opinions in Dr. Pauly's expert report. In the notes attached as an exhibit to the report, however, Dr. Pauly includes statements suggesting that he suspected bias on Dr. Parmele's part. The court agrees with the defendants that opinions about the motivations of Lorillard's corporate executives are outside the scope of Dr. Pauly's expertise and are not proper expert testimony. Dr. Pauly's testimony should be confined to conclusions that may or may not be drawn from the documents relating to the testing.

2. Opinions about Testing of Original Kents Conducted by Dr. Millette and Dr. Longo

Dr. Pauly was also asked to analyze more recent testing conducted by Dr. Millette and Dr. Longo on original Kent cigarettes manufactured in the 1950s. Lorillard and H&V argue that Dr. Pauly may not testify for the improper purpose of bolstering Plaintiff's expert, Dr. James

Millette, or to introduce into evidence the reports of Dr. Longo. The court has reviewed Dr. Pauly's report with respect to his opinions on Dr. Longo and Dr. Millette's work.

With respect to Dr. Longo, Dr. Pauly's report summarizes the testing performed by Dr. Longo in 1991. It then states, "This investigation was carefully crafted, executed appropriately, and in-depth analyses are used to support the conclusion stated." (Pauly Report 21.) The report next summarizes Longo's 1995 article in four sentences, and states, "This report documents a carefully crafted research scheme." (*Id.*) Next, the report summarizes Dr. Longo's 2012 study and states, "The investigators have crafted an investigation that addresses and refutes any criticisms that have arisen previously as to inadequate conditioning of the test cigarettes or inappropriate mechanical smoking devices." (*Id.* at 23.)

With respect to Dr. Millette, Dr. Pauly summarizes the testing performed by Dr. Millette on original Kent cigarettes and the results of the testing. He then states that "the investigation is detailed with respect to purpose, research scheme, materials and methods, instrumentation, and test product origin and custody. The acid/base digestion method is innovative and scientifically sound. Summarily, as an aggregate, this investigation provides ample data to support the author's conclusion" (*Id.* at 24.)

An expert may rely on information provided by non-testifying experts, so long as he does not merely serve as a spokesman for the absent expert, vouching for the truth of his statements. *In re James Wilson Assocs.*, 965 F.2d 160, 172-73 (7th Cir. 1992). An expert must explain the methodology and principles supporting his opinion, and that opinion must amount to "more than a 'bottom line.'" *Minix v. Canarecci*, 597 F.3d 824, 835 (7th Cir. 2010). Although Dr. Pauly is qualified to offer an opinion as to the merits of Dr. Longo and Dr. Millette's research, his expert report amounts to little more than a summary of Dr. Longo and Dr. Millette's conclusions,

followed by a "bottom-line" statement that those conclusions are valid. The report includes no basis for the court to evaluate how Dr. Pauly arrived at the conclusion that the studies were well-designed and thorough. Dr. Pauly's bare assertions about the merits of Dr. Millette's and Dr. Longo's research adds little, if any, value to the trier of fact. His endorsement of their conclusions is therefore excluded.

C. Dr. Pauly's Anticipated Rebuttal Testimony

Quirin anticipates that Dr. Pauly will offer testimony to rebut the testimony of two of Lorillard and H&V's expert witnesses, Dr. Reinert and Dr. Melvin W. First. As to Dr. Reinert, Quirin represents that Dr. Pauly will take issue with Dr. Reinert's evaluation of testing performed on original Kent cigarettes in the 1950s. The court has already concluded that Dr. Pauly is permitted to offer testimony regarding the possible shortcomings of the testing and the evidence documenting it.² Lorillard and H&V are correct, however, that Dr. Pauly is not qualified to testify as to whether Dr. Reinert is a credible witness. An expert may not opine on another witness's credibility. *Goodwin v. MTD Prods. Inc.*, 232 F.3d 600, 609 (7th Cir. 2000).

As to Dr. First, Quirin states that Dr. Pauly will "rebut Dr. First's opinions regarding the forces of physics that purportedly serve to prevent fiber release from cigarette fibers." (Pl.'s Resp. to Mot. to Exclude 18.) Lorillard and H&V argue that Dr. Pauly is not qualified to critique Dr. First's work because he "has just reviewed documents" and was unfamiliar with Dr. First's work prior to this litigation. (Defs.' Mot. to Exclude 20.) Nor, they argue, has Dr. Pauly worked directly with filters containing asbestos. The court concludes that, although Dr. Pauly has not

Lorillard and H&V further argue that Dr. Pauly should not criticize Dr. Reinert's statements about a patent on the Micronite filter. Quirin does not respond to this argument, and it is not clear to the court what anticipated testimony is being challenged. Even so, nothing in the record suggests that Dr. Pauly has any expertise concerning patents. Thus, the court concludes that Dr. Pauly is not qualified to offer testimony about the patent process.

conducted studies on filters containing asbestos, his experience studying cigarette filters for the

release of other types of fibers qualifies him to offer an opinion on studies of this nature.

Therefore, Dr. Pauly will be permitted to offer his opinion on Dr. First's conclusions, although,

of course, he may not attack Dr. First's credibility.

III. CONCLUSION

Quirin's "Motion to Preclude Reliance by Defendants' Expert Witnesses on Scientifically

Unreliable Testing Performed by Lorillard in the 1950s" is granted in part and denied in part.

Lorillard and H&V's experts may not offer opinions relying on the testing performed by Dr.

Killian or the Laboratory of Industrial Hygiene. If Lorillard and H&V wish to offer opinions

relying on the work of Dr. Kendall and Dr. Fullam, they may move the court for a Daubert

hearing on that evidence. The motion is denied with respect to testing conducted by the Armour

Research Foundation. Lorillard and H&V's "Motion to Exclude the Expert Testimony of John

Pauly, Ph.D." is granted in part and denied in part. Dr. Pauly's testimony regarding the testing

performed by Lorillard and various contractors in the 1950s is admissible, as is his rebuttal

testimony. His testimony regarding testing performed by Dr. Millette and Dr. Longo is not.

ENTER:

JOAN B. GOTTSCHALL

United States District Judge

DATED: March 6, 2014

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